

ABSTRACT

A system of three-dimensional multipurpose elements is disclosed, consisting of single solid elements which can be computer-controlled to move, connect to one another, and disconnect from one another. A single element of the system consists of a casing made up of walls (6), linked with each other by means of an electroplastic actuator (3) which changes the reciprocal position of the walls of the casing of a single element. Changes in the reciprocal position of the walls occur according to the exciting signal transmitted from a programmable integrated circuit (1). Heat emitters (14) carry away excess heat from the system devices. Inside a single element there are provided interlocks (7) for connecting respective single elements, as well as magnetic coils (8) and a voltage source (5) supplying the integrated circuit (1), interlocks, magnetic coils and electroplastic actuator.